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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,444	11/03/2005	Ralph Brandes	277672US0XPCT	4353
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER MARCHESCHI MICHAEL A				
ART UNIT		PAPER NUMBER		
1793				
NOTIFICATION DATE		DELIVERY MODE		
10/29/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/555,444

Applicant(s)

BRANDES ET AL.

Examiner

Michael A. Marcheschi

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite because the examiner is unclear as to what the additives are.

Claims 1, 3-4 and new claims 7-10 are rejected under 35 U.S.C. 103(a) as obvious over Menzel et al. (156).

The reference teaches in the abstract and sections 0012-0030, an aqueous dispersion having a pH of 4-12.4 (i.e. can be literal value of 4) comprising 1-30 weight percent silicon-aluminum mixed oxide having a surface area of 50-200 m²/g, wherein the aluminum oxide content is 0.1-99.9 weight percent (i.e. can be literal values of 0.1 or 99.9 weight percent), wherein the powder has a structure consisting of amorphous silicon dioxide regions (claim 1). The dispersion can also contain additives, such as an oxidizer and other particles, such as silica doped with alumina, as well as pH adjusters. The size of the mixed oxide is less than 100 nm.

No patentable distinction is seen to exist between the reference and the claimed invention absent evidence to the contrary because the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re*

Wertheim 191 USPQ 90 (CCPA 1976). With respect to the surface characteristics of the powder (i.e. surface zone), since the method is the same, the same results are expected and thus obvious because the same method obviously produces particles having the same characteristics absent clear evidence to the contrary.

With respect to the last limitation of claim 1, the reference powder has a structure consisting of amorphous silicon dioxide regions (claim 1), thus this teaching shows that no signals for crystalline silicon dioxide are apparent. With respect to the surface characteristics of the powder (i.e. surface zone), since the method is the same, the same results are expected and thus inherent absent clear evidence to the contrary.

With respect to claim 4, the dispersion of the reference also contains other particles, such as silica doped with alumina and this reads on silica particles defined in instant claim 4 because it is a silica particle and the claim does not distinguish this from a silica doped particle.

With respect to new claim 7 (amount of additional oxide), the reference states that an additional oxide can be present (see section relating to instant claim 4) and although the amount is not defined, this is obvious because (1) the lack of any teaching for the amount reads on any and all amounts broadly encompassing the claimed amounts absent evidence of criticality and (2) one skilled in the art would have appreciated that since this additional metal oxide is a supplemental metal oxide to the mixed oxide specifically used (i.e. silicon-aluminum mixed oxide having a surface area of 50-200 m²/g), the content of said additional oxide (which would be an optional additive) would constitute a minor proportion, thus broadly reading on the claimed amount absent evidence to the contrary.

With respect to new claims 8-10, as defined in the summary of the reference teachings, the reference teaches these new limitations.

Claims 2, 4 and new claim 7 are rejected under 35 U.S.C. 103(a) as obvious over Menzel et al. (156), as applied to claim 1 above and further in view of Schroeder et al. (763).

The rejection of claim 4 and 7 is an alternative rejection to the ones defined above.

With respect to claim 2, the primary reference teaches that the dispersion contains an oxidizer and although the amount is not defined by the primary reference, this is obvious because it is the examiners position that the lack of an amount for the oxidizer implies that any conventional amount for this component can be used as long as it provides the necessary oxidizing characteristic. In view of this, one skilled in the art would have found it obvious to use any known conventional amounts, such as those defined by Schroeder et al. in section 0035, because this amount is conventionally known to provide the necessary oxidizing characteristic to polishing compositions, which is what the dispersion of the primary reference is used for.

With respect to claim 4, polishing compositions are generally known to contain abrasives and the abrasives can be silica, alumina, etc. and co-formed products thereof (i.e. this broadly reads on co-formed products of silica and alumina, such as a silica/alumina mixed oxide), as shown by Schroeder et al. in section 0018 and thus, it is prima facie obvious to combine two or more materials disclosed by the prior art to form a third material (mixture of abrasive particles) that is to be used for the same purpose. In re Kerkhoven 205 USPQ 1069. In addition, since Schroeder et al. clearly teaches that abrasives for polishing compositions can be a combination of

silica and a co-formed product of silica/alumina (i.e. silica/alumina mixed oxide), this further establishes motivation to use this combination in the primary reference.

With respect to new claim 7 (amount of additional oxide), the secondary reference teaches that mixture of abrasive can be used (i.e. a combination of silica and a co-formed product of silica/alumina (i.e. silica/alumina mixed oxide)-(see section relating to instant claim 4) and although the amount is not defined, this is obvious because the recitation of a combination would clearly imply and that any and all concentrations of the individual oxides can be present and the lack of any teaching for the individual amount reads on any and all amounts broadly encompassing the claimed amounts absent evidence of criticality.

Applicant's arguments filed 9/23/08 have been fully considered but they are not persuasive.

With respect to the indefinite rejection, applicants argue that one skilled in the art would understand what additives are. Although this may be true, the claim does not define what the additives are and thus would seem to include any and all additive, such as tetraethyl lead which clearly is not intended. Applicants argue that since other patents refer to additives this shows that the claimed recitation is not indefinite. It is to be noted that all applications are examined individually, and the fact that some issued patents may contain indefinite subject matter, in no way makes the instant invention more definite. In addition, it is to be noted that claim 3 defines "a dispersion comprising at least one additive" and it is respectfully submitted that the mixed oxide power of claim 1 is an "additive" in the broadest sense, thus the claim, as written would not be a further limiting claim.

With respect to the anticipation rejection, this part of the previous rejection has been withdrawn, thus no further comment is necessary.

With respect to the obviousness rejection, applicants argue the working examples of the reference, however, this is not persuasive because as is apparent, a reference can be used for all it realistically teaches and is not limited to only the examples. Applicants also argue that the instant case defines criticality (i.e. table 1, P₄). This is also not persuasive because (1) criticality is not established for any and all compositions commensurate in scope with what is claimed (i.e. only one example within the claimed range is not sufficient to establish criticality over a broad range of alumina proportions, surface areas, etc.) and (2) it is to be noted that in this example, glycine and hydrogen peroxide are added, and thus this example is insufficient to establish criticality for a composition that does not contain these specific components (i.e. the claims are silent as to these components). Applicants are reminded that in order to establish criticality the evidence must show critically for composition commensurate in scope with what is claimed. Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356. To establish unexpected results over a claimed range, applicants should compare a sufficient number of tests both inside and outside (i.e. as well as the upper and lower limits) the claimed range to show the criticality of the claimed range. *In re Hill* 284 F.2d 955, 128 USPO 197 (CCPA 1960).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael A Marcheschi/
Primary Examiner, Art Unit 1793